



Aurora

The Aero Aerial

The Newsletter of the Aero Amateur Radio Club
 Middle River, MD
 Volume 16, Issue 2
 February 2020

Editor Georgeann Vleck KB3PGN

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President	Joe Miko WB3FMT
Vice-President	Rob Ballou KC3ROB
Recording Secretary	Larry Hill KB3QWC
Corresponding Secretary	Pat Stone AC3F
Treasurer	Warren Hartman W3JDF
Resource Coordinator	Ron Distler W3JEH

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VE Testing	Pat Stone AC3F
Public Service	Bob Landis WA3SWA
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Trustee:	Dave Fredrick KB3KRV (W3PGA) Jim Marshalek KC3FBL (AE3RO)
Club Nets	Joe Miko WB3FMT
Contests	Bob Venanzi ND3D

Website: <http://w3pga.org>

Facebook: <https://www.facebook.com/pages/Aero-Amateur-Radio-Club/719248141439348>

About the Aero Amateur Radio Club

Meetings

The Aero Amateur Radio Club meets at 7:30 pm on the first and third Wednesdays of the month at Essex SkyPark, 1401 Diffendall Road, Essex. Meetings begin at 7:30 p.m. local time. Meetings are canceled if Baltimore County Public Schools are closed or dismiss early.

Repeaters

W3PGA 2 M : INPUT : 147.84 MHz, OUTPUT : 147.24 MHz, PL 123.0
W3PGA 70 Cm: INPUT : 444.575 MHz, OUTPUT : 449.575 MHz, PL123.0
W3JEH 1.25 M: INPUT : 222.24 MHz, OUTPUT : 223.84 MHz

Club Nets

Second Wednesday Net – 70 Centimeters (449.575 MHz Repeater) @ 8 p.m. Local Time

Fourth Wednesday Net – 2 Meters (147.24 MHz Repeater) @ 8 p.m. Local Time

Fifth Wednesday Net – 10 Meters (28.445 MHz) @ 8 p.m. Local Time

Radio License Exams

The Aero Amateur Radio Club sponsors Amateur Radio License Exams with the ARRL VEC. Examination sessions are throughout the year. Walk-ins are welcome; arrive no later than 30 minutes after start time. \$15 charge.

2019-2020 Examination Schedule

Time:	1:15 pm		
Dates:	Sunday, Mar. 8, 2020	FD Saturday	
Where:	White Marsh Library	FBO, Essex SkyPark	

White Marsh Library, 8133 Sandpiper Circle, White Marsh, MD

Contact: Patricia Stone AC3F, email: ac3f@juno.com, landline: 410-687-7209

LOCAL AREA NETS

Day	Time	Freq. (MHz)	Net Name
Daily	9 – 10 am	145.330	Oriole Net
Daily	6 pm	3.820	Maryland Emergency Phone Net
Daily	6:30 – 7 pm	145.330 no PL	Balto. Traffic Net (b/u 146.670 PL 107.2)
Daily	7 pm & 10 pm	3.643	MD/DC/DE Traffic Net
2 nd Tue	7:30 pm	146.670	Baltimore County RACES Net
2 nd Wed	8 pm	449.575	Aero ARC Net
4 th Wed	8 pm	147.240	Aero ARC Net
5 th Wed	8 pm	28.445	Aero ARC Net
Fridays	7:30 pm	145.330	Back in the Day Net
When activated by NOAA		147.030	SkyWarn (primary)

Aero ARC Snow Emergency Plan

If Baltimore County Schools are **closed** on a meeting Wednesday, then there will be **No meeting**, in its place there will be a 2 meter net at 8:00 pm.

If schools have an **early dismissal** due to weather on a meeting Wednesday, there will be **no meeting** at the Essex Skypark, and we will have a 2 meter net at 8:00 pm.

If Baltimore Co has a **late opening** (2 hours late), then there will be a **meeting** at the airport.

If **we get snow** on the days before the meeting, I will drive to the airport to see if it is safe to have a meeting. They don't plow the parking lot. I will send out an email as to whether there will be a meeting.

If you have any questions, please call me at 443-956-0197.

Joe Miko

Net Reports

1-15-20: 449.575 MHz, 20:00 to 20:18 local.

W3PGA NCS Joe Essex, KB3VAE Richard Middle River, N3VBJ Jerry Rosedale, W3VRD Phil Essex, KB3QWC Larry Middle River

5 participants on the net.

1-29-20: 147.24r, 20:00 to 20:40 local.

W3PGA NCS Joe Essex, W3JEH Ron Perry Hall, KB3VAE Richard Middle River, K3DON Don Joppatowne, AC3F Pat Middle River, KB3QWC Larry Middle River, WA3QLY Tom Middle River, AC3EK Harry Rosedale, W3VRD Phil Essex, K3TEL Arnold Towson

10 people on the net.

Topics: New Extra info for the 7/1/20 release. CW and Phone dates [for contest] were provided by Ron; info to be emailed to club members.



VE CORNER

by Pat Stone, AC3F

Our next test session will be held on Sunday, March 8 at 1:15 pm in the White Marsh Library. Hope to see you then.

VE Testing Snow Plan

If Baltimore County Libraries are closed for a testing day (Saturday or Sunday) the VE Testing session for that day will be canceled. Testing applicants that have pre-registered will be notified by phone. Due to the scheduling requirements of Baltimore County Library, we can't schedule a makeup session. Testing will resume on the next scheduled testing date. VE's will be notified by phone in the event of a closure.

Club News

March 7 & 8: The Club will participate in the ARRL International DX Contest (phone).

ARRL International DX, CW and Phone contest

The CW part is Feb 15 -16, 2020 and the Phone is on March 7-8, 2020. Either of these or both can be a club event (s)if you want it to be?

Let me know if you are interested in participation in either event. If we get enough takers, we can see about getting FBO for one of days. The last contest the club was involved with was a two-day event running from Friday evening thru Sunday night. We set up antennas on Saturday afternoon, and were on the air a 17:00 local, we worked a total of 24 ½ hours. We were cleaned up by 18:00 local on that Sunday.

Please let me know your interest for either event. Either by email or at the next meeting on February 5th. Any questions call me at 443-956-0197.

Thanks,
Joe M

DUES REMINDER

Dues were due in January. Pay the treasurer or the president, \$24 per year, \$2 additional for a family member.

BOY SCOUTS

May 16 – scouting event at the SkyPark, merit badge activities, contact Rich or Joe for information.

Club Member friend, a dental assistant student, needs Patients to practice on. Contact (call or text) Molly Mescher 443-648-5734 for an appointment. Location: CCBC Dental Center, Dundalk. Adults: \$20 dental cleaning and exam, \$5-25 x-rays if needed; children 14 and under, adults over 65, CCBC alumni and students: \$10. Hours: 8 – 11:30 am Tuesdays, 1 – 4:30 pm Thursdays

PUBLIC SERVICE

Saturday, May 16, 2020. BSA Merit Badge Council

The Aero Amateur Radio Club has been asked by the BSA to assist them in providing merit badge council for Radio and Communications and possibly more. This scouting event will be held at the Essex Skypark on May 16th a Saturday. It will be similar to what the club provided last June at the Skypark. I spoke to Kelli at the Baltimore Scouting Center and she sent me the forms that need to be completed. All members of the club that are at the event must fill out these forms. The forms are to be sent to the Baltimore Scouting office no later than May 8th. If you have a Youth Protection Certificate with an end date of 2021 or 2022, you don't need to reapply I just need a copy of your certificate. If you have any questions, please give me a call at 443-956-0197 or see me at the meeting.

Joe Miko, WB3FMT

For those who are not familiar with this event, here is Joe's report of last year's activity:

Chesapeake Scouts Aviation



On Saturday June 8th the Aero ARC participated in the **Chesapeake Scouts Aviation** event. This was the first time the Essex Skypark was used, it was formerly at the Martin State Airport. The move to Essex was to provide more space for the Scouts. The Aero Club was asked to set up an active HF radio station and to be a merit badge councilor for the "Signs, Signals and Codes" merit badge. We had initially planned for 16 scouts and 15 showed up. The following Aero members did the following training: Patricia AC3F – Morse Code, Lou KC3NMT - Braille, John K3FIL

(another club) – American Sign Language, and Joe WB3FMT – Semaphore and Nautical Flags. Rob KC3ROB, Dave AC3EO, Steve KD3TP and Harry AC3EK ran the HF rig. The operators did a script for the Scouts to use while talking to other stations from Florida to Canada and out west to Kansas. Our formal training ran from 10:15 am to 12:00 pm but was expanded to include the “Radio” merit badge and then continued to after 3:00 pm. There were over 400 scouts registered for this event. Patricia AC3F was able to sign off on not 15, but **30 merit badges**. Plans are in the works for next year.

Aero members helping and teaching with this event: Ray N3RES, Rob KC3ROB, Dave AC3EO, Steve KD3TP, Harry AC3EK, Richard KB3VAE, Joe WB3FMT, Patricia AC3F, Lou KC3NMT and John K3FIL. The event ran from 08:00 am to 4:00 pm.

Hamfests

Saturday, April 18, 2020: Delmarva Amateur Radio and Electronics Expo

Location: CHEER Community Center, 20520 Sand Hill Rd., Georgetown, DE (intersection of Rte. 9 and Sand Hill Rd.)

Sponsor: Sussex Amateur Radio Assn.

Talk-In: 147.090R, PL 156.7

Website: www.radioelectronicsexpo.com

Contact: Jamie Ashton, W3UC, Chairman, 410-202-7690, hamfestdelaware@gmail.com

Admission: \$6, under 18 free

Hours: 7:30 Tailgating, 8:00 Indoor Expo, 12:00 VE Testing (last seating 12:30)

Tailgating and Vendors

Restaurant available.

From the Skies over Mt. Essex

SKY Events for February 2020

Feb 1st – The Space Shuttle Columbia STS 107 disintegrated on re-entry killing all 7 aboard in 2003 also a First Quarter Moon

Feb 8th – Clyde Tombaugh discovered the 9th Planet\ Pluto in 1930.

Feb 9th – Full Moon, “Snow Moon” for Traditional and the “Crow Moon” for the Shawnee American Indian.

Feb 10th – Mercury 18° E greatest elongation from the Sun

Feb 11th – The Zodiacal Light is Visible in the W after evening twilight for the next 2 weeks.

Feb 15th – Last Quarter Moon

Feb 18th – Mars is 0.8° S of the Moon 13UT, 08 EST

Feb 20th – Jupiter is 0.9° N of the Moon also John Glenn first American to orbit the Earth 3 times in 1962: Saturn is 1.7° N of the Moon at 14UT, 09EST.

Feb 23rd – New Moon

Feb 27th – Venus is 6° N of the Moon 12UT, 07EST

Feb 29th – Extra Day Leap Year

Planet Lookout at mid-Month

Sunrise 06:51 EST and Sunset 17:42 EST

Mercury Evening Rise 07:27 Set 19:02; Mag -0.6; Size 7.2arc seconds

Venus Evening Rise 08:41, Sets 21:11; Mag -4.2 and 16.3 arc seconds.

Mars Morning Rises 03:33, Sets 13:04, Mag 1.3 and 5.0 arc seconds wide.

Jupiter Morning, rises 4:44, Sets 14:24; Mag-1.9 size 33 arc seconds.

Saturn Morning, rises 5:21, Sets 15:12; Mag 0.6 size 15.2 arc seconds.

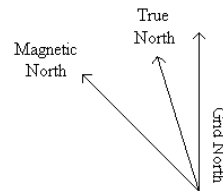
Uranus Evening **Rises** 09:46 Sets 23:04; Mag 5.8 size 3.5 arc seconds.

Neptune Evening Rises 07:53 Sets 19:17; Mag +7.9 size 2.4 arc seconds.

North to

Did you know there are 4 different types of North? Yep

Different types of north. When working with a map and compass there are usually three **different** norths to be considered: **True North**, **Grid North** and **Magnetic North**.



Grid north (GN) is a navigational term referring to the direction northwards along the **grid** lines of a **map** projection. It is contrasted with **true north** (the direction of the **North Pole**) and **magnetic north** (the direction in which a compass needle points).



There is now a fourth: **Google Maps North**. Each day the Earth rotates about its axis once.

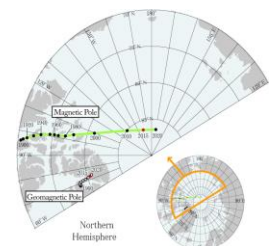
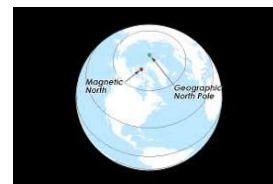
The North Pole

The North Pole, also known as the Geographic North Pole or Terrestrial North Pole, is defined as the point in the Northern Hemisphere where the Earth's axis of rotation meets its surface. The North Pole is the northernmost point on the Earth, lying diametrically opposite the South Pole. Wikipedia



North Magnetic Pole

The North Magnetic Pole is a wandering point on the surface of Earth's Northern Hemisphere at which the planet's magnetic field points vertically downwards. There is only one location where this occurs, near the Geographic North Pole and the Geomagnetic North Pole. Ref.Wikipedia



North Geomagnetic Pole

There is another magnetically based north pole: the north geomagnetic pole. "One thing that's very confusing is the fact that there's a magnetic pole and a geomagnetic pole and that they're different," The geomagnetic poles are almost an artifact of reducing Earth's complex and varied magnetic field to that of a simple bar magnet, or dipole.